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<b>Application of:</b>	Bajaj, S. Paul	<b>Group No.:</b>	1653
<b>Serial No.:</b>	10/662,784	<b>Atty. Docket No.:</b>	66153-39722
<b>Filed:</b>	September 15, 2003		
<b>For:</b>	<i>REGION OF FACTOR IXa PROTEASE DOMAIN THAT INTERACTS WITH FACTOR VIIIa AND METHODS THEREFOR</i>		
<b>Examiner:</b>	Not Yet Assigned		

Commissioner of Patents and Trademarks  
P.O. Box 1450  
Alexandria, VA 22313-1450

HONORABLE SIR:

The present application is a continuation in part of U.S. application no. 09/584,866 (Patent No. 6,624,289 B1). Pursuant to the MPEP § 609.I.A.2, Applicant is not providing copies of the references listed in the enclosed Information Disclosure Statement. According to this section of the MPEP, references that have been considered by the U.S.P.T.O. in the parent application need not be resubmitted.

Respectfully submitted,

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**TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT**  
**(Under 37 CFR 1.97(b) or 1.97(c))**

Docket No.  
66153-39722

In Re Application Of:

Bajaj, S. Paul

Serial No.  
10/662,784

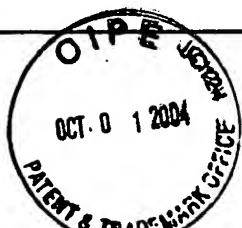
Filing Date  
September 15, 2003

Examiner  
Not Yet Assigned

Group Art Unit  
1653

Title:

*REGION OF FACTOR IXa PROTEASE DOMAIN THAT INTERACTS WITH FACTOR VIIIa AND METHODS THEREFOR*



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**37 CFR 1.97(b)**

1. ☒ The Information Disclosure Statement submitted herewith is being filed within three months of the filing of a national application other than a continued prosecution application under 37 CFR 1.53(d); within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; before the mailing of a first Office Action on the merits, or before the mailing of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114.

**37 CFR 1.97(c)**

2. ☐ The Information Disclosure Statement submitted herewith is being filed after the period specified in 37 CFR 1.97(b), provided that the Information Disclosure Statement is filed before the mailing date of a Final Action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an Action that otherwise closes prosecution in the application, and is accompanied by one of:

☐ the statement specified in 37 CFR 1.97(e);

**OR**

☐ the fee set forth in 37 CFR 1.17(p).

Per 37 CFR §1.98(d), copies of the references cited in the accompanying Information Disclosure Statement are not provided herewith because such references were previously cited by or submitted to the Patent and Trademark Office in a parent application to which this application relies upon for an earlier filing date under 35 U.S.C. §120.

**TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT**  
(Under 37 CFR 1.97(b) or 1.97(c))

Docket No.  
66153-39722

In Re Application:

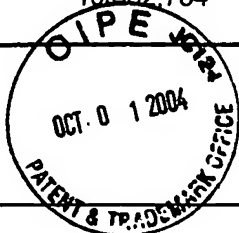
Bajaj, S. Paul

Serial No.  
10/662,784

Filing Date  
September 15, 2003

Examiner  
Not Yet Assigned

Group Art Unit  
1653



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Substitute for form 1449A/PTO

# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(use as many sheets as necessary)

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of

5

**Complete if Known**

Application Number

10/662,784

Filing Date

September 15, 2003

First Named Inventor

Bajaj, S. Paul

Art Unit

1653

Examiner Name

Not Yet Assigned

Attorney Docket Number

66153-39722

**U.S. PATENT DOCUMENTS**

Examiner Initials	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		US- 5,932,706	08-03-1999	Mertens et al.	
		US-			
		US-			

**FOREIGN PATENT DOCUMENTS**

Examiner Initials	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
		WO 93/09804	05-27-1993	Griffin et al.		
		WO 94/25482	11-10-1994	Evans et al.		

**OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
		MATHUR et al., Protease and EGF1 domains of factor IXa play distinct roles in binding to factor VIIIa, J. Biol. Chem., 1999, 274(26): 18477-18486	
		YOSHITAKE et al., Nucleotide sequence of the gene for human factor IX (antihemophilic factor B), Biochemistry, 1985, 24: 3736-3750	
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		DAVIE et al., The coagulation cascade: initiation, maintenance, and regulation, Biochemistry, 1991, 30: 10363-10370	

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			Application Number	10/662,784	
			Filing Date	September 15, 2003	
			First Named Inventor	Bajaj, S. Paul	
			Group Art Unit	1653	
			Examiner Name	Not Yet Assigned	
Sheet	2	of	5	Attorney Docket Number	66153-39722

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		BRANDSTETTER et al., X-ray structure of clotting factor IXa: active site and module structure related to Xase activity and hemophilia B., Proc. Natl. Acad. Sci. USA, 1995, 92: 9796-9800	
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		ASTERMARK et al., The gamma-carboxyglutamic acid and epidermal growth factor-like modules of factor IXa beta. Effects on the serine protease module and factor X activation, J. Biol. Chem., 1994, 269: 3682-3689	
		O'BRIEN et al., Localization of factor IXa and factor VIIIa interactive sites, J. Biol. Chem., 1995, 270: 27087-27092	

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			Filing Date	September 15, 2003	
			First Named Inventor	Bajaj, S. Paul	
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		BAJAJ et al., Human factor IX and factor IXa, Methods Enzymol, 1993, 222: 96-128	
		MATHUR et al., Interaction of factor IXa with factor VIIIa. Effects of protease domain Ca2+ binding site, proteolysis in the autolysis loop, phospholipids, and factor X, J. Biol. Chem., 1997, 272: 23418-23426	
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		LINK and CASTELLINO, The activation of bovine factor X by bovine factor Xa, Arch. Biochem. Biophys., 1982, 215: 215-221	
		VAN DIEIJEN et al., The role of phospholipids and factor VIIIa in the activation of bovine factor X, J. Biol. Chem. 1981, 256: 3433-3442	

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			First Named Inventor	Bajaj, S. Paul	
			Group Art Unit	1653	
			Examiner Name	Not Yet Assigned	
Sheet	4	of	5	Attorney Docket Number	66153-39722

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
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		FAY and KOSHIBU, The A2 subunit of factor VIIIa modulates the active site of factor IXa, J. Biol. Chem., 1998, 273: 19049-19054	
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		REES et al., The role of beta-hydroxyaspartate and adjacent carboxylate residues in the first EGF domain of human factor XI, EMBO J., 1988, 7: 2053-2061	
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		BAJAJ et al., Synthesis and expression of tissue factor pathway inhibitor by serum-stimulated fibroblasts, vascular smooth muscle cells and cardiac myocytes, Thrombos. Haemostas, 1999, 82: 1663-1672	

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		CHANG et al., Changing residue 338 in human factor IX from arginine to alanine causes an increase in catalytic activity, J. Biol. Chem., 1998, 273: 12089-12094	
		LIN et al., Expression and characterization of human factor IX and factor IX-factor X chimeras in mouse C127 cells, J. Biol. Chem., 1990, 265: 144-150	
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		BAJAJ et al., A monoclonal antibody to factor IX that inhibits the factor VII:Ca potentiation of factor X activation, J. Biol. Chem., 1985, 260: 11574-11580	

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